

PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

1. (Currently Amended) A method for reducing power consumption of a decoder in a communication system, comprising:
 - estimating a quality metric of a channel associated with a segment of a received signal;
 - determining a quality metric threshold;
 - delimiting an interval ~~in accordance with a modified~~ based in part on the quality metric threshold; and
 - decoding the segment when the estimated quality metric is outside of the interval.
2. (Original) The method of claim 1 wherein the estimating a quality metric comprises estimating a signal-to-noise ratio.
3. (Currently Amended) The method of claim 1 wherein the estimating a quality metric of a channel associated with a segment of a received signal comprises estimating a quality metric of a channel associated with a slot of a received signal.
4. (Currently Amended) The method of claim 1 wherein the determining a quality metric threshold comprises:
 - determining ing a data rate of the segment;
 - determining a number of segments received; and
 - determining a quality metric threshold in accordance with the data rate and the number of segments.
5. (Original) The method of claim 1 wherein delimiting an interval comprises:
 - determining a real-valued parameter Δ_0 ; and
 - defining the interval in accordance with a formula $(-\infty, TS + \Delta_0)$, where TS is the quality metric threshold.

6. (Original) The method of claim 5 wherein the determining a real-valued parameter Δ_0 comprises determining the parameter Δ_0 in accordance with a demodulator performance.
7. (Original) The method of claim 5 wherein the parameter Δ_0 is less than or equal to zero.
8. (Original) The method of claim 1 wherein the decoding the segment comprises:
delimiting a plurality of intervals in accordance with the quality metric threshold;
associating each of the plurality of intervals with one of a plurality of parameters;
determining an interval from the plurality of intervals into which the estimated quality metric belongs; and
decoding the received signal for a number of iterations equal to the one of a plurality of parameters associated with the determined interval.
9. (Currently Amended) The method of claim 8 wherein the delimiting a plurality of intervals comprises:
determining a plurality of real-valued parameters

$$\Delta_0 \leq \Delta_1 \leq \dots \leq \Delta_m \leq 0 < \Delta_{m+1} \leq \Delta_{m+2} \leq \dots \Delta_{m+n};$$
and
defining the plurality of intervals in accordance with the formulas:

$$[TS + \Delta_{k-1}, TS + \Delta_k], \text{ for all } k \in (1, n+m); \text{ and}$$

$$[TS + \Delta_{n+m}, \infty),$$
where n, m are non-negative, integer-valued parameters, and TS is the quality metric threshold.
10. (Original) The method of claim 9 wherein the parameters $\Delta_1, \dots, \Delta_m, \Delta_{m+1}, \Delta_{m+2}, \dots \Delta_{m+n}$ are determined in accordance with a demodulator performance.
11. (Original) The method of claim 8 wherein a plurality of parameters comprise non-negative, integer-valued parameters $N_1 \leq \dots \leq N_m \geq N_{m+1} \geq N_{m+2} \geq \dots N_{n+m+1}$.
12. (Original) The method of claim 11 wherein the parameters $N_1, \dots, N_m, N_{m+1}, N_{m+2}, \dots N_{n+m+1}$ are determined in accordance with a demodulator performance.

13. (Cancelled)
14. (Currently Amended) An apparatus for reducing power consumption of a decoder in a communication system, comprising:
 - a processor; and
 - a processor-readable storage medium accessible by the processor and containing a set of instructions executable by the processor to:
 - estimate a quality metric of a channel associated with a segment of a received signal;
 - determine a quality metric threshold;
 - delimit an interval ~~in accordance with a modified~~ based in part on the quality metric threshold; and
 - decode the segment when the estimated quality metric is outside of the interval.
15. (Original) The apparatus of claim 14 wherein the quality metric is a signal-to-noise ratio.
16. (Original) The apparatus of claim 14 wherein the segment of a received signal is a slot.
17. (Original) The apparatus of claim 14 wherein the quality metric threshold is determined in accordance with a data rate of the segment and a number of segments received.
18. (Original) The apparatus of claim 14 wherein the set of instructions is further executable by the processor to delimit the interval by:
 - determining a real-valued parameter Δ_0 ; and
 - defining the interval in accordance with a formula $(-\infty, TS + \Delta_0)$, where TS is the quality metric threshold.
19. (Original) The apparatus of claim 18 wherein the parameter Δ_0 is determined in accordance with a demodulator performance.
20. (Original) The apparatus of claim 18 wherein the parameter Δ_0 is less than or equal to zero.

21. (Original) The apparatus of claim 14 wherein the set of instructions is further executable by the processor to decode the segment by:

delimiting a plurality of intervals in accordance with the quality metric threshold;
 associating each of the plurality of intervals with one of a plurality of parameters;
 determining an interval from the plurality of intervals into which the estimated quality metric belongs; and

decoding the received signal for a number of iterations equal to the one of a plurality of parameters associated with the determined interval.

22. (Currently Amended) The apparatus of claim 21 wherein the set of instructions is further executable by the processor to delimit a plurality of intervals by:

determining a plurality of real-valued parameters

$$\Delta_0 \leq \Delta_1 \leq \dots \leq \Delta_m \leq 0 < \Delta_{m+1} \leq \Delta_{m+2} \leq \dots \Delta_{m+n}; \text{ and}$$

defining the plurality of intervals in accordance with the formulas:

$$[TS + \Delta_{k-1}, TS + \Delta_k], \text{ for all } k \in (1, n+m); \text{ and}$$

$$[TS + \Delta_{n+m}, \infty),$$

where n, m are non-negative, integer-valued parameters, and TS is the quality metric threshold.

23. (Original) The apparatus of claim 22 wherein the parameters

$\Delta_1, \dots, \Delta_m, \Delta_{m+1}, \Delta_{m+2}, \dots \Delta_{m+n}$ are determined in accordance with a demodulator performance.

24. (Original) The apparatus of claim 21 wherein a plurality of parameters comprise non negative, integer-valued parameters $N_1 \leq \dots \leq N_m \geq N_{m+1} \geq N_{m+2} \geq \dots N_{n+m+1}$.

25. (Original) The apparatus of claim 24 wherein the parameters $N_1, \dots, N_m, N_{m+1}, N_{m+2}, \dots N_{n+m+1}$ are determined in accordance with a demodulator performance.

26. (Cancelled)

27. (Currently Amended) A processor-readable medium for reducing power consumption of a decoder in a communication system, comprising instructions executable by a processor to:

estimate a quality metric of a channel associated with a segment of a received signal;
determine a quality metric threshold;
delimit an interval ~~in accordance with a modified~~ based in part on the quality metric threshold; and
decode the segment when the estimated quality metric is outside of the interval.

28. (Original) The processor-readable medium of claim 27 wherein the quality metric is a signal-to-noise ratio.

29. (Original) The processor-readable medium of claim 27 wherein the segment of a received signal is a slot.

30. (Original) The processor-readable medium of claim 27 wherein the quality metric threshold is determined in accordance with a data rate of the segment and a number of segments received.

31. (Original) The processor-readable medium of claim 27 wherein the set of instructions is further executable by the processor to delimit the interval by:

determining a real-valued parameter Δ_0 ; and
defining the interval in accordance with a formula $(-\infty, TS + \Delta_0)$, where TS is the quality metric threshold.

32. (Original) The processor-readable medium of claim 31 wherein the parameter Δ_0 is determined in accordance with a demodulator performance.

33. (Original) The processor-readable medium of claim 31 wherein the parameter Δ_0 is less than or equal to zero.

34. (Original) The processor-readable medium of claim 27 wherein the set of instructions is further executable by the processor to decode the segment by:

delimiting a plurality of intervals in accordance with the quality metric threshold;
associating each of the plurality of intervals with one of a plurality of parameters;

determining an interval from the plurality of intervals into which the estimated quality metric belongs; and

decoding the received signal for a number of iterations equal to the one of a plurality of parameters associated with the determined interval.

35. (Currently Amended) The processor-readable medium of claim 27 wherein the set of instructions is further executable by the processor to delimit a plurality of intervals by:

determining a plurality of real-valued parameters

$$\Delta_0 \leq \Delta_1 \leq \dots \leq \Delta_m \leq 0 < \Delta_{m+1} \leq \Delta_{m+2} \leq \dots \Delta_{m+n}; \text{ and}$$

defining the plurality of intervals in accordance with the formulas:

$$[TS + \Delta_{k-1}, TS + \Delta_k] , \text{ for all } k \in (1, n+m); \text{ and}$$

$$[TS + \Delta_{n+m}, \infty)] ,$$

where n, m are non-negative, integer-valued parameters, and TS is the quality metric threshold.

36. (Original) The processor-readable medium of claim 35 wherein the parameters $\Delta_1, \dots, \Delta_m, \Delta_{m+1}, \Delta_{m+2}, \dots \Delta_{m+n}$ are determined in accordance with a demodulator performance.

37. (Original) The processor-readable medium of claim 27 wherein a plurality of parameters comprise non-negative, integer-valued parameters

$$N_1 \leq \dots \leq N_m \geq N_{m+1} \geq N_{m+2} \geq \dots N_{n+m+1}.$$

38. (Original) The processor-readable medium of claim 37 wherein the parameters $N_1, \dots, N_m, N_{m+1}, N_{m+2}, \dots N_{n+m+1}$ are determined in accordance with a demodulator performance.

39. (Cancelled)

40. (Previously Presented) The method of claim 1 wherein the quality metric is slot based.

41. (Previously Presented) The apparatus of claim 14 wherein the quality metric is slot based.

42. (Previously Presented) The processor-readable medium of claim 27 wherein the quality metric is slot based.